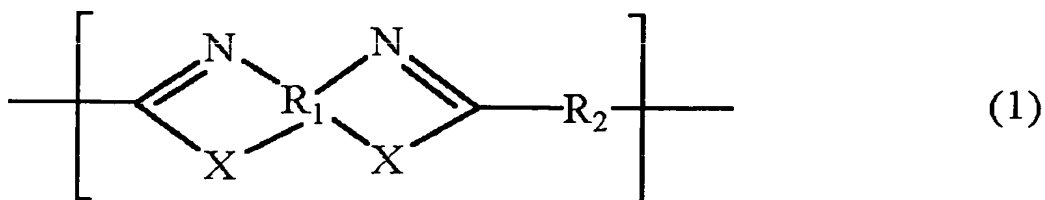


What is claimed is:

1. An optical resin comprising a poly(benzoxazole) having repeating units represented by the following general formula (1) as a constituent:



5 wherein R_1 represents a tetravalent organic group having an aromatic ring, N and X in each of the two sets thereof are linked to two atoms at the ortho-position on the aromatic ring of R_1 to form a 5-membered ring, R_2 represents a divalent organic group and X represents an oxygen atom or a sulfur atom.

10 2 The optical resin of claim 1, wherein it comprises, as a constituent, a poly(benzoxazole) having repeating units represented by the general formula (1) in which X represents an oxygen atom.

3 The optical resin of claim 2, wherein the poly(benzoxazole) is a fluorine-containing poly(benzoxazole).

15 4 The optical resin of claim 3, wherein the fluorine-containing poly(benzoxazole) is a product obtained by a reaction of at least one bis(aminophenol) derivative with at least one dicarboxylic acid derivative; at least one member selected from the group consisting of the foregoing at least one bis(aminophenol) derivative and the foregoing at least one dicarboxylic acid derivative is a fluorine-containing derivative and at least one member selected from the foregoing group is a fluorine-free derivative.

20 5 The optical resin of claim 4, wherein the fluorine-containing bis(aminophenol) derivative is a trifluoromethyl group-containing

bis(aminophenol) derivative and the fluorine-containing dicarboxylic acid derivative is a trifluoromethyl group-containing dicarboxylic acid derivative.

6 The optical resin of claim 1, wherein it comprises, as a constituent, a
poly(benzothiazole) having repeating units represented by the general
5 formula (1) in which X represents a sulfur atom.

7 The optical resin as set forth in any one of claims 1 to 6, wherein the
number of the repeating units represented by the general formula (1) ranges
from 1 to 500.

8 The optical resin as set forth in any one of claims 1 to 7, wherein the
10 optical transmission factors as determined using light rays having
wavelengths of 1300 nm and 1550 nm are not less than 80%.

9 The optical resin as set forth in any one of claims 1 to 7, wherein the
refractive indexes as determined using light rays having wavelengths of
1300 nm and 1550 nm range from 1.45 to 1.75.

15 10 The optical resin as set forth in any one of claims 1 to 7, wherein the
rates of birefringence as determined using light rays having wavelengths of
1300 nm and 1550 nm are not more than 0.008.

11 An optical waveguide prepared using the optical resin as set forth in
any one of claims 1 to 10.

20 12 An optical filter prepared using the optical resin as set forth in any
one of claims 1 to 10.

13 An optical lens prepared using the optical resin as set forth in any
one of claims 1 to 10.